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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/786,120	02/26/2004	Hiroshi Hosokawa	248752US3	1852
22850	7590	09/08/2005	EXAMINER	
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			WALSH, RYAN D	
			ART UNIT	PAPER NUMBER
			2852	

DATE MAILED: 09/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/786,120	Applicant(s) HOSOKAWA ET AL.	
	Examiner Ryan D. Walsh	Art Unit 2852	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-36 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-36 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>6/1/04, 7/16/04 & 3/18/2005 & 7/5/05</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

The disclosure is objected to because of the following informalities:

Page 11, Ln. 22, "of" should be changed to or. Appropriate correction is required.

Claim Objections

Claims 3-5 and 18-20 are objected to because of the following informalities:

Regarding claims 3-5 and 18-20, "oriented along a direction substantially equal to a direction of a surface of the image carrier" is unclear terminology.

Regarding claims 4-5 and 19-20, "a stepped relationship relative to the surface" is unclear terminology. Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-7, 11, 15-22, 26, 30-36 are rejected under 35 U.S.C. 102(b) as being anticipated by Takeuchi et al. (US Pat. # 6,408,142).

Regarding claim 1, Takeuchi et al. teach, "A process cartridge detachably attached to an image forming apparatus, comprising: an image carrier (7) configured to carry an image; at least one image forming process device (8) configured to perform

image forming processes; a case (Fig. 3) configured to integrally accommodate the image carrier and the at least one image forming process device; and a first non-slip holding portion (Fig. 3, ref. # 12d top set, or Fig. 49) provided on a surface of the case, wherein the process cartridge is configured to move in a direction substantially parallel to a longitudinal direction of the image carrier (the limitation does not require the cartridge to be internal to the image forming apparatus when moved), and insertion or removal of the process cartridge from the image forming apparatus is facilitated by grasping the process cartridge by the first non-slip holding portion and a rear surface of the case opposite from the first non-slip holding portion (Fig. 49)."

Regarding claims 2 and 17, Takeuchi et al. teach, "further comprising: a second non-slip holding portion (Fig. 3, ref. # 12d bottom set) provided on the rear surface of the case, wherein insertion or removal of the process cartridge from the image forming apparatus is facilitated by grasping the process cartridge by the first and the second non-slip holding portions."

Regarding claims 3 and 18, as best the examiner can ascertain from the language of the claims, Takeuchi et al. teach, "wherein the case further comprises an opening exposing (Fig. 3, ref. # 9) at least a portion of the image carrier, and the surface of the case containing the first non-slip holding portion is oriented along a direction substantially equal to a direction of a surface of the image carrier exposed through the opening (a "direction of a surface" is not limited to any particular direction)."

Regarding claims 4 and 19, as best the examiner can ascertain from the language of the claims, Takeuchi et al. teach, "wherein the surface on which the first

non-slip holding portion is provided is in a stepped relationship [relative to any surface, (12d) is in a step relationship to (7)] relative to the surface of the image carrier exposed through the opening.”

Regarding claims 5 and 20, as best the examiner can ascertain from the language of the claims Takeuchi et al. teach, “wherein the surface on which the first non-slip holding portion is provided is located at a position lower than the surface [relative to any surface, (12d) is lower than (7)] of the image carrier exposed through the opening.”

Regarding claims 6 and 21, Takeuchi et al. teach, “wherein the surface of the case containing the first non-slip holding portion is disposed on a front side of the case (see Fig. 49, ref. # 12d) substantially oriented in a direction of movement of the process cartridge from an inserted position to a pulled-out position.”

Regarding claims 7 and 22, Takeuchi et al. teach, “wherein the first non-slip holding portion is disposed at a position opposite from a position of the image carrier relative to a center position of the case in a substantially horizontal direction of the case orthogonal to the direction of movement of the process cartridge (see Fig. 49, ref. # 12d).”

Regarding claims 11 and 26, Takeuchi et al. teach, “wherein the first non-slip holding portion is distinguished from a surface of the case other than the surface of the case on which the first non-slip holding portion is provided (see Fig. 49, ref. # 12d, different surfaces).”

Regarding claims 15, 30, 34 and 36, Takeuchi et al. teach, "wherein the at least one image forming process device comprises at least one of a developing device (10) configured to develop the image carried by the image carrier, a charging device (8) configured to charge a surface of the image carrier, and a cleaning device (11) configured to clean the surface of the image carrier."

Regarding claim 16, Takeuchi et al. teach, "An image forming apparatus, comprising: an image carrier (7) configured to carry an image; image forming process devices (8) configured to perform image forming processes; a process cartridge (Fig. 3) detachably attached to the image forming apparatus, the process cartridge comprising: a case (Fig. 3) configured to integrally accommodate the image carrier and at least one of the image forming process devices; and a first non-slip holding portion (Fig. 3, ref. # 12d top set, or Fig. 49) provided on a surface of the case, wherein the process cartridge is configured to move in a direction substantially parallel to a longitudinal direction of the image carrier (the limitation does not require the cartridge to be internal to the image forming apparatus when moved), and insertion or removal of the process cartridge from the image forming apparatus is facilitated by grasping the process cartridge by the first non-slip holding portion and a rear surface of the case opposite from the first non-slip holding portion (Fig. 49)."

Regarding claim 31, Takeuchi et al. teach, "wherein the image forming apparatus forms single-color images (Col. 39, Ln. 33-37)."

Regarding claim 32, Takeuchi et al. teach, "further comprising a plurality of process cartridges to form multi-color images (Col. 39, Ln. 33-37)."

Regarding claim 33, Takeuchi et al. teach, "A process cartridge detachably attached to an image forming apparatus, comprising: image carrying means (7) for carrying an image; image forming process means (8) for performing image forming processes; accommodating means (Fig. 3) for accommodating at least one of the image carrying means and the image forming process means; and a first non-slip holding means (Fig. 3, ref. # 12d top set, or Fig. 49) for facilitating handling the process cartridge, the first non-slip holding means being provided on a surface of the accommodating means, wherein the process cartridge is configured to move in a direction substantially parallel to a longitudinal direction of the image carrying means (the limitation does not require the cartridge to be internal to the image forming apparatus when moved), and insertion or removal of the process cartridge from the image forming apparatus is facilitated by grasping the process cartridge by the first non-slip holding means and a rear surface of the accommodating means opposite from the first non-slip holding means (Fig. 49)."

Regarding claim 35, Takeuchi et al. teach, "An image forming apparatus, comprising: image carrying means (7) for carrying an image; image forming process means (8) for performing image forming processes; a process cartridge (Fig. 3) detachably attached to the image forming apparatus, the process cartridge comprising: accommodating means (Fig. 3) for accommodating at least one of the image carrying means and the image forming process means; and a first non-slip holding means (Fig. 3, ref. # 12d top set, or Fig. 49) for facilitating handling the process cartridge, the first non-slip holding means being provided on a surface of the accommodating means,

wherein the process cartridge is configured to move in a direction substantially parallel to a longitudinal direction of the image carrying means (the limitation does not require the cartridge to be internal to the image forming apparatus when moved), and insertion or removal of the process cartridge from the image forming apparatus is facilitated by grasping the process cartridge by the first non-slip holding means and a rear surface of the accommodating means opposite from the first non-slip holding means (Fig. 49)."

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 8-10 and 23-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takeuchi et al. (US Pat. # 6,408,142) in view of Miyabe et al. (US Pat. # 6,836,629).

Regarding claims 8 and 23, Takeuchi et al. do not teach, "further comprising: a grip configured to be gripped when the process cartridge is moved between the inserted position and the pulled-out position, the grip being provided on a frontal wall surface of the case in the direction of movement of the process cartridge." However, having a grip configured to be gripped when the process cartridge is moved between the inserted position and the pulled-out position, the grip being provided on a frontal wall surface of the case in the direction of movement of the process cartridge is routine in the art as

shown by Miyabe et al. (see Fig. 3, ref. # 29). It would have been obvious at the time the invention was made to modify Takeuchi et al. to include a grip configured to be gripped when the process cartridge is moved between the inserted position and the pulled-out position, the grip being provided on a frontal wall surface of the case in the direction of movement of the process cartridge.

The ordinary artisan would have been motivated to modify Takeuchi et al. invention in a manner described above for at least the purpose of promoting removal of the cartridge in a side region of an image forming apparatus.

Regarding claims 9 and 24, Takeuchi et al. teach, "wherein the image carrier is configured to rotate (Col. 8, Ln. 28-30)." Takeuchi et al. do not teach, "the first non-slip holding portion and the grip are provided on sides opposite to each other relative to a vertical plane containing a rotational axis of the image carrier." However, having the first non-slip holding portion and the grip are provided on sides opposite to each other relative to a vertical plane containing a rotational axis of the image carrier is routine in the art as shown by Miyabe et al. (see Fig. 5, ref. # 29). It would have been obvious at the time the invention was made to modify Takeuchi et al. to include the first non-slip holding portion and the grip are provided on sides opposite to each other relative to a vertical plane containing a rotational axis of the image carrier.

The ordinary artisan would have been motivated to modify Takeuchi et al. invention in a manner described above for at least the purpose of stabilizing the cartridge from above and behind the cartridge during removal from an image forming apparatus.

Regarding claims 10 and 25, Takeuchi et al. do not teach, "wherein a distance between the first non-slip holding portion and the rotational axis of the image carrier is greater than a distance between the grip and the rotational axis of the image carrier." However, wherein a distance between the first non-slip holding portion and the rotational axis of the image carrier is greater than a distance between the grip and the rotational axis of the image carrier is routine in the art as shown by Miyabe et al. (see Fig. 5, ref. # 29). It would have been obvious at the time the invention was made to modify Takeuchi et al. to include wherein a distance between the first non-slip holding portion and the rotational axis of the image carrier is greater than a distance between the grip and the rotational axis of the image carrier.

The ordinary artisan would have been motivated to modify Takeuchi et al. invention in a manner described above for at least the purpose of promoting proper stabilization, to move the cartridge in or out of the image forming apparatus at different positions/angles.

Claims 12-14 and 27-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takeuchi et al. (US Pat. # 6,408,142) in view of Miyabe et al. (US Pat. # 5,943,529).

Regarding claims 12 and 27, Takeuchi et al. do not teach, "wherein a frictional coefficient of the first non-slip holding portion is greater than a frictional coefficient of the surface of the case." However, wherein a frictional coefficient of the first non-slip holding portion is greater than a frictional coefficient of the surface of the case is routine in the art as shown by Miyabe et al. (Fig. 3, ref. # 24 and Col. 6, Ln. 45-48, the surface

of (24) has a higher friction to serve as a holder for the cartridge). It would have been obvious at the time the invention was made to modify Takeuchi et al. to include wherein a frictional coefficient of the first non-slip holding portion is greater than a frictional coefficient of the surface of the case.

The ordinary artisan would have been motivated to modify Takeuchi et al. invention in a manner described above for at least the purpose of promoting a stronger grip to handle the process cartridge.

Regarding claims 13 and 28, Takeuchi et al. teach, "wherein the first non-slip holding portion is formed by carving the surface of the case (Fig. 49, ref. # 12d, is carved inward)."

Regarding claims 14 and 29, Takeuchi et al. do not teach, "wherein the first non-slip holding portion is formed by attaching a member to the surface of the case." However, wherein the first non-slip holding portion is formed by attaching a member to the surface of the case is routine in the art as shown by Miyabe et al. (Fig. 3, ref. # 24 and Col. 6, Ln. 45-48, member is attached in figure). It would have been obvious at the time the invention was made to modify Takeuchi et al. to include the first non-slip holding portion is formed by attaching a member to the surface of the case.

The ordinary artisan would have been motivated to modify Takeuchi et al. invention in a manner described above for at least the purpose of promoting easier mounting or dismounting of the process cartridge.

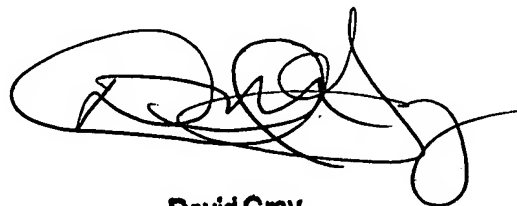
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ryan D. Walsh whose telephone number is 571-272-2726. The examiner can normally be reached on M-F 7:00am-3:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Gray can be reached on 571-272-2119. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Ryan D. Walsh
Patent Examiner
Art Unit 2852

A handwritten signature in black ink, appearing to read 'David Gray', with a large, stylized loop at the end.

David Gray
Primary Examiner